



# Next generation affinity-tuned CAR for prostate cancer

# **Grant Award Details**

Next generation affinity-tuned CAR for prostate cancer

Grant Type: Therapeutic Translational Research Projects

Grant Number: TRAN1-13370

Investigator:

Name: PREET Chaudhary

**Institution**: University of Southern California

Type: PI

**Award Value**: \$5,805,144

Status: Pre-Active

# **Grant Application Details**

**Application Title:** Next generation affinity-tuned CAR for prostate cancer

## **Public Abstract:**

## **Translational Candidate**

A next generation cell therapy product that targets prostate cancer cells

#### Area of Impact

Prostate cancer

#### **Mechanism of Action**

The therapeutic candidate when expressed on the surface of immune cells allow them to binds to a protein that is overexpressed on the prostate cancer cells and kills them.

## **Unmet Medical Need**

Prostate cancer is the fourth most common cancer globally and the second leading cause of cancer death among men in the United States, with a 60% occurrence rate in men over the age of 65. Approximately 61,860 patients are expected to die from prostate cancer in California in the year 2021.

# **Project Objective**

pre-IND meeting

## **Major Proposed Activities**

- Generate GMP compatible lentiviral vector encoding the therapeutic candidate
- Process development and scale up for cGMP manufacturing of the therapeutic candidate
- Rodent studies to determine the efficacy and safety of cGMP manufactured therapeutic candidate

# California:

Statement of Benefit to Californians will benefit in several significant ways. Approximately 61,860 patients die from prostate cancer in California every year. If the therapeutic is successful, it will extend the longterm survival rates for Californians with prostate cancer. The proposed studies will have an added economic benefit for California by creating skilled jobs and new companies. The current therapeutic would also reduce hospital cost through improved efficacy and safety.

Source URL: https://www.cirm.ca.gov/our-progress/awards/next-generation-affinity-tuned-car-prostate-cancer